App. Serial No. 10/509,562
Docket No.: NL 020263 US

In the claims:

Please amend claim 1 and enter new claims 10-13 as indicated below. This listing of claims replaces all prior versions.

1. (*Currently Amended*) VLIW processor comprising:
a plurality of functional units;
a distributed register file accessible by the functional units;
and a partially connected communication network ~~for coupling~~ that transfers values from the functional units ~~and~~ to selected parts of the distributed register file; and ~~characterized in that the VLIW processor further comprises~~
communication means for selecting a subset of the functional units and coupling the subset of the functional units ~~and~~ to each part of the distributed register file, and for transferring values from the subset of the functional units to each part of the distributed register file.

2. (*Previously Presented*) A VLIW processor according to Claim 1 wherein:
the communication means comprise a multiplexer and a bus, the multiplexer being arranged for coupling the functional units and the bus, the bus being arranged for coupling the multiplexer and the distributed register file.

3. (*Previously Presented*) A VLIW processor according to Claim 1 wherein:
the communication means are arranged for communication with a first latency, the partially connected communication network is arranged for communication with a second latency, the first latency exceeding the second latency.

4. (*Previously Presented*) A VLIW processor according to Claim 2 wherein: the bus comprises at least one pipeline register.

5. (*Previously Presented*) A VLIW processor according to Claim 2 wherein:
the multiplexer comprises at least one register.

2

6. (*Currently Amended*) A VLIW processor according to Claim 1, <u>further</u> comprising a first plurality of functional units and a second plurality of functional units;

a first pass unit associated with one of the functional units of the first plurality for passing data from one of the distributed register files associated with the first plurality of functional units to one of the distributed register files associated with the second plurality of functional units;

and a second pass unit associated with one of the functional units of the second plurality for passing data from one of the distributed register files associated with the second plurality of functional units to one of the distributed register files associated with the first plurality of functional units.

7. (*Previously Presented*) A VLIW processor according to Claim 6 wherein:

the pass units are part of the respectively associated functional units.

8. (*Previously Presented*) A VLIW processor according to Claim 1 wherein:

the communication means couple the functional units and all parts of the distributed register file.

9. (*Cancelled*)

10. (*New*) A VLIW processor comprising:

a plurality of functional units;

a distributed register file including a plurality of register file segments accessible by the functional units;

a partially connected communication network that transfers values from the functional units to the plurality of register file segments; and

a communication device that selects a subset of the functional units and couples the subset of the functional units to each of the plurality of register file segments, and that transfers values from the subset of the functional units to each of the plurality of register file segments.

3

App. Serial No. 10/509,562
Docket No.: NL 020263 US

11. (*New*) The VLIW processor of claim 10, wherein the values are transferred from the subset of the functional units to each of the plurality of register file segments via the communication device when the values are unable to be transferred from the subset of the functional units to each of the plurality of register file segments via the partially connected communication network.

12. (*New*) For use in a VLIW processor having a partially connected communication network that transfers values from a plurality of functional units to a plurality of register file segments, a method for transferring values from the plurality of functional units to a distributed register file, the distributed register file including the plurality of register file segments that are accessible by the functional units, the method comprising:

selecting a subset of the plurality of functional units;

coupling the subset of the plurality of functional units to each of the plurality of register file segments; and

transferring values from the subset of the plurality of functional units to each of the plurality of register file segments.

13. (New) The method of claim 12, further comprising determining that values are unable to be transferred from the subset of the plurality of functional units to each of the plurality of register file segments via the partially connected communication network, and in response thereto transferring values from the subset of the plurality of functional units to each of the plurality of register file segments.

4